

STEEL PIPE ADAPTERS

Straights Pg. 200-205
Shapes Pg. 206-210
Bulkheads Pg. 210-211
Female Swivels Pg. 224-227
O-Ring Fittings Pg. 227-230

CONFORMANCE

- SAE J514
- SAE J1926/1, SAE J1926/3.
- ISO 11926-1, ISO 11926-3

MATERIALS

- Steel - SAE 12L14 carbon steel plated zinc with yellow dichromate or bright iridite finish.

WORKING PRESSURES

The following table lists the recommended working pressures for steel O-ring Straight Thread Fittings made in accordance with SAE standard J514. Many factors such as surging, vibration, mechanical shock and over tightening may affect the integrity of the fitting or fitting connection.. SAE recommends sufficient testing to be conducted to assure that performance levels will be safe and satisfactory, especially if installed in systems operating at elevated pressures or in severe conditions. When using the fittings with different size or thread type, use the lower pressure rating of the two threads.

**SAE J514 O-RING STRAIGHT THREAD
FITTINGS PRESSURE RATINGS FOR STRAIGHT
AND ADJUSTABLE THREAD PORT STUDS**

Dash Size	Straight Thread	4 TO 1 Minimum Burst PSI Straight O-ring	4 to 1 Minimum Burst PSI Adjustable O-ring
-2	5/16-34	5000	5000
-3	3/8-24	5000	5000
-4	7/16-20	5000	4500
-5	1/2-20	5000	4000
-6	9/16-16	5000	4000
-8	3/4-16	1800	4000
-10	7/8-14	3500	3000
-12	1-5/16-12	3000	2500
-20	1-5/8-12	2500	2000
-24	1-7/8-12	2000	1500
-32	2-1/2-12	1500	1125

CAUTION: Although most O-ring Straight Thread Fittings have sufficient structural integrity to support the weight of many components, consult our technical support department for guidance in selection of parts for this purpose.

**STEEL STRAIGHT THREAD O-RING
RECOMMENDED ASSEMBLY INSTRUCTIONS**

- Step 1.** Inspect port areas to be free of any contaminant.
- Step 2.** Lubricate o-ring and threads on fitting.
- Step 3.** Turn fitting into port finger tight, then torque to the value shown in the following tables.

- Step 2.** Looking at fitting from end with nut/washer/o-ring assembly, turn nut clockwise as far as possible.
- Step 3.** Using wrench pad, turn fitting into port until the washer touches thread nearest wrench pad.
- Step 4.** Back off fitting counterclockwise not exceeding one revolution until it is orientated in the correct position.
- Step 5.** Place wrench on the wrench pad of fitting to prevent fitting from turning, and torque nut to the value shown in the following table.

J514 & J1926/3 TORQUE VALUES

Dash Size	Straight Thread	Straight Stud Torque	Adjustable Stud Torque
-2	5/16-24	6	6
-3	3/8-24	6	6
-4	7/16-20	9	8
-5	1/2-20	14	9
-6	9/16-18	18	12
-8	3/4-16	27	20
-10	7/8-14	36	30
-12	1-1/16-12	65	44
-14	1-3/16-12	75	53
-16	1-5/16-12	85	59
-20	1-5/8-12	115	75
-24	1-7/8-12	125	105
-32	2-1/2-12	290	225

J514 & J1926/2 TORQUE VALUES

Dash Size	Straight Thread	Straight Stud Torque	Adjustable Stud Torque
-2	5/16-24	NA	NA
-3	3/8-24	NA	NA
-4	7/16-20	14	11
-5	1/2-20	18	14
-6	9/16-18	24	18
-8	3/4-16	40	28
-10	7/8-14	55	44
-12	1-1/16-12	95	65
-14	1-3/16-12	105	75
-16	1-5/16-12	120	85
-20	1-5/8-12	160	115
-24	1-7/8-12	175	125

ADJUSTABLE STUD

- Step 1.** Follow steps 1 and 2 from the forgoing instructions, then proceed to the following steps below.

WHY WET TOQUE?

Due to the difference in plating types and thickness, materials, and thread quality of different components, the coefficient of friction varies greatly on any given assembly. Lubrication not only produces a more consistent coefficient of friction, it increases clamping force on sealing area with less torque on the threads. Over tightening causes threads to yield, deform and lose their ability to maintain an adequate load of clamping force on the sealing area. Extended operation and severe conditions cause further yielding which results in leaks. Over tightening is the single greatest cause for leaks in metal to metal seat hydraulic connections. It is our firm position, that to not wet torque, is to compromise consistency and quality for convenience.



JIC TO O-RING CONNECTOR



PART #	Thread Size 1	O-Ring Thread 2
516-02-02S	5/16-24	5/16-24
516-03-03S	3/8-24	3/8-24
516-04-04S	7/16-20	7/16-20
516-04-03S	7/16-20	3/8-24
516-04-05S	7/16-20	1/2-20
516-04-06S	7/16-20	9/16-18
516-04-08S	7/16-20	3/4-16
516-04-10S	7/16-20	7/8-14
516-05-05S	1/2-20	1/2-20
516-05-04S	1/2-20	7/16-20
516-05-06S	1/2-20	9/16-18
516-06-06S	9/16-18	9/16-18
516-06-04S	9/16-18	7/16-20
516-06-05S	9/16-18	1/2-20
516-06-08S	9/16-18	3/4-16
516-06-10S	9/16-18	7/8-14
516-06-12S	9/16-18	1-1/16-12
516-06-16S	9/16-18	1-5/16-12
516-08-08S	3/4-16	3/4-16
516-08-04S	3/4-16	7/16-20
516-08-06S	3/4-16	9/16-18
516-08-10S	3/4-16	7/8-14
516-08-12S	3/4-16	1-1/16-12
516-08-16S	3/4-16	1-5/16-12
516-10-10S	7/8-14	7/8-14
516-10-06S	7/8-14	9/16-18
516-10-08S	7/8-14	3/4-16
516-10-12S	7/8-14	1-1/16-12
516-10-16S	7/8-14	1-5/16-12
516-10-20S	7/8-14	1-5/8-12
516-12-12S	1-1/16-12	1-1/16-12
516-12-08S	1-1/16-12	3/4-16
516-12-10S	1-1/16-12	7/8-14
516-12-14S	1-1/16-12	1-3/16-12
516-12-16S	1-1/16-12	1-5/16-12
516-12-20S	1-1/16-12	1-5/8-12
516-14-14S	1-3/16-12	1-3/16-12
516-14-12S	1-3/16-12	1-1/16-12
516-14-16S	1-3/16-12	1-5/16-12
516-16-16S	1-5/16-12	1-5/16-12
516-16-10S	1-5/16-12	7/8-14
516-16-12S	1-5/16-12	1-1/16-12
516-16-14S	1-5/16-12	1-3/16-12
516-16-20S	1-5/16-12	1-5/8-12
516-16-24S	1-5/16-12	1-7/8-12
516-20-20S	1-5/8-12	1-5/8-12
516-20-12S	1-5/8-12	1-1/16-12
516-20-16S	1-5/8-12	1-5/16-12
516-20-24S	1-5/8-12	1-7/8-12
516-24-24S	1-7/8-12	1-7/8-12
516-24-20S	1-7/8-12	1-5/8-12
516-24-32S	1-7/8-12	2-1/2-12
516-32-32S	2-1/2-12	2-1/2-12
516-32-24S	2-1/2-12	1-7/8-12

*Also available in Stainless Steel
Also Available in restrictor*

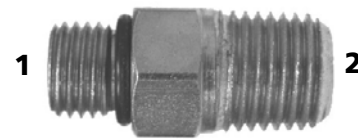
LONG JIC TO O-RING CONNECTER



Part #	Thread Size 1	O-Ring Thread 2	Length
516L-04-04S	7/16-20	7/16-20	2.12"
516L-06-06S	9/16-18	9/16-18	2.31"
516L-08-08S	3/4-16	3/4-16	2.68"
516L-10-10S	7/8-14-12	7/8-14-12	3.00"
516L-12-12S	1-1/16-12	1-1/16-12	3.56"
516L-16-16S	1-5/16-12	1-5/16-12	4.00"
516L-20-20S	1-5/8-12	1-5/8-12	4.62"

Also available in Stainless Steel

O-RING TO PIPE ADAPTER



Part #	O-Ring Thread 1	Male Pipe Thread 2
617-04-02S	7/16-20	1/8
617-04-04S	7/16-20	1/4
617-05-02S	1/2-20	1/8
617-06-04S	9/16-18	1/4
617-06-06S	9/16-18	3/8
617-06-08S	9/16-18	1/2
617-08-06S	3/4-16	3/8
617-08-08S	3/4-16	1/2
617-08-12S	3/4-16	3/4
617-10-08S	7/8-14	1/2
617-12-08S	1-1/16-12	1/2
617-12-12S	1-1/16-12	3/4
617-16-16S	1-5/16-12	1
617-20-20S	1-1/8-12	1-1/4
617-24-24S	1-1/8-12	1-1/2
617-32-32S	2-1/2-12	2

More sizes available

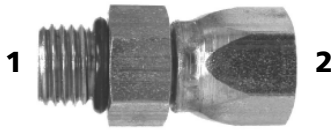
Some sizes available in Stainless Steel

No word in the English language rhymes with month, orange, silver, or purple.



Hydraulic Adapters

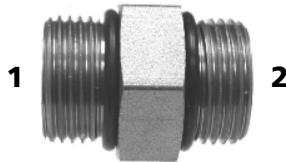
**O-RING TO 37° JIC
SWIVEL ADAPTER**



Part #	O-Ring Thread 1	Thread Size 2
500-04-04S	7/16-20	7/16-20
500-05-05S	1/2-20	1/2-20
500-06-06S	9/16-18	9/16-18
500-06-08S	9/16-18	3/4-16
500-08-08S	3/4-16	3/4-16
500-08-06S	3/4-16	9/16-18
500-10-10S	7/8-14	7/8-14
500-12-12S	1-1/16-12	1-1/16-12
500-14-14S	1-3/16-12	1-3/16-12
500-16-16S	1-5/16-12	1-5/16-12
500-16-12S	1-5/16-12	1-1/16-12
500-20-20S	1-5/8-12	1-5/8-12
500-24-24S	1-7/8-12	1-7/8-12

*More sizes available
Some sizes available in Stainless Steel*

O-RING HEX NIPPLE UNION



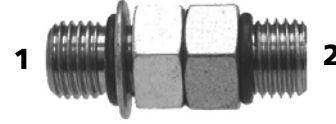
Part #	O-Ring Thread 1	Thread Size 2
6403-O-4	7/16-20	7/16-20
6403-O-6	9/16-18	9/16-18
6403-O-6-4	9/16-18	7/16-20
6403-O-8	3/4-16	3/4-16
6403-O-10	7/8-14	7/8-14
6403-O-10-8	7/8-14	3/4-16
6403-O-12	1-1/16-12	1-1/16-12
6403-O-12-8	1-1/16-12	3/4-16
6403-O-12-10	1-1/16-12	7/8-14
6403-O-16	1-5/16-12	1-5/16-12

More sizes available

George Bush:
When you rearrange the letters:
He buys Gore

ADJUSTABLE O-RING HEX NIPPLE

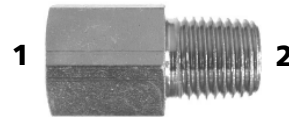
SAE 09009A



Part #	O-Ring Thread 1	O-Ring Thread 2
04F50-F50S	7/16-20	7/16-20
06F50-F50S	9/16-18	9/16-18
08F50-F50S	3/4-16	3/4-16
08-06F50-50S	3/4-16	9/16-18
10F50-F50S	7/8-14	7/8-14
10-08F50-F50S	7/8-14	3/4-16
12F50-F50S	1-1/16-12	1-1/16-12
12-08F50-F50S	1-1/16-12	3/4-16
12-10F50-F50S	1-1/16-12	7/8-14
16F50-F50S	1-5/16-12	1-5/16-12
16-125F50-F50S	1-5/16-12	1-1/16-12
20-F50-F50S	1-5/8-12	1-5/8-12
24-F50-F50S	1-7/8-12	1-7/8-12
32F50-F50S	2-1/2-12	2-1/2-12

Also available in Stainless Steel

FEMALE O-RING TO MALE PIPE ADAPTER



Part #	O-Ring Thread 1	Male Pipe Thread 2
509-04-02S	7/16-20	1/8
509-04-04S	7/16-20	1/4
509-06-04S	9/16-18	1/4
509-06-06S	9/16-18	3/8
509-06-08S	9/16-18	1/2
509-08-04S	3/4-16	1/4
509-08-06S	3/4-16	3/8
509-08-08S	3/4-16	1/2
509-10-08S	7/8-14	1/2
509-10-12S	7/8-14	3/4
509-10-16S	7/8-14	1
509-12-12S	1-1/16-12	3/4
509-16-16S	1-5/16-12	1
509-20-20S	1-1/8-12	1-1/4

More sizes available

The Morse Code:
When you rearrange the letters:
Here come dots

Slot Machines:
When you rearrange the letters:
Cash lost in em

**Hydraulic
Adapters**

O-RING TO FEMALE PIPE ADAPTER

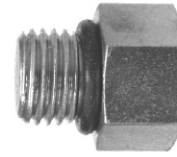


Part #	O-Ring Thread 1	Female Pipe Thread 2
507-02-02S	5/16-24	1/8
507-02-04S	5/16-24	1/4
507-03-02S	3/8-24	1/8
507-03-04S	3/8-24	1/4
507-04-02S	7/16-20	1/8
507-04-04S	7/16-20	1/4
507-05-02S	1/2-20	1/8
507-05-04S	1/2-20	1/4
507-06-02S	9/16-18	1/8
507-06-04S	9/16-18	1/4
507-06-06S	9/16-18	3/8
507-06-08S	9/16-18	1/2
507-06-12S	9/16-18	3/4
507-08-04S	3/4-16	1/4
507-08-06S	3/4-16	3/8
507-08-08S	3/4-16	1/2
507-08-12S	3/4-16	3/4
507-10-04S	7/8-14	1/4
507-10-06S	7/8-14	3/8
507-10-08S	7/8-14	1/2
507-10-12S	7/8-14	3/4
507-12-06S	1-1/16-12	3/8
507-12-08S	1-1/16-12	1/2
507-12-12S	1-1/16-12	3/4
507-12-16S	1-1/16-12	1
507-14-08S	1-3/16-12	1/2
507-14-12S	1-3/16-12	3/4
507-14-16S	1-3/16-12	1
507-16-06S	1-5/16-12	3/8
507-16-08S	1-5/16-12	1/2
507-16-12s	1-5/16-12	3/4
507-16-16S	1-5/16-12	1
507-16-20S	1-5/16-12	1-1/4
507-20-12S	1-5/8-12	3/4
507-20-20S	1-5/8-12	1-1/4
507-20-24S	1-5/8-12	1-1/2
507-24-16S	1-7/8-12	1
507-24-20S	1-7/8-12	1-1/4
507-24-24S	1-7/8-12	1-1/2
507-32-20S	2-1/2-20	1-1/4
507-32-24S	2-1/2-12	1-1/2
507-32-32S	2-1/2-12	2

*Some sizes available in Stainless Steel
More sizes available*

O-RING HEX HEAD PLUG

SAE 090109A

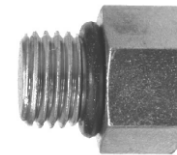


Part #	O-Ring Thread
506-02S	5/16-24
506-03S	3/8-24
506-04S	7/16-20
506-05S	1/2-20
506-06S	9/16-18
506-08S	3/4-16
506-10S	7/8-14
506-12S	1-1/16-12
506-14S	1-3/16-20
506-16S	1-5/16-12
506-20S	1-5/8-12
506-24S	1-7/8-12
506-32S	2-1/2-12

Also available in Stainless Steel

**O-RING HOLLOW
HEX HEAD PLUG**

SAE 090109A



Part #	O-Ring Thread
506S-02S	5/16-24
506S-03S	3/8-24
506S-04S	7/16-20
506S-05S	1/2-20
506S-06S	9/16-18
506S-08S	3/4-16
506S-10S	7/8-14
506S-12S	1-1/16-12
506S-14S	1-3/16-20
506S-16S	1-5/16-12
506S-20S	1-5/8-12
506S-24S	1-7/8-12
506S-32S	2-1/2-12

Also available in Stainless Steel

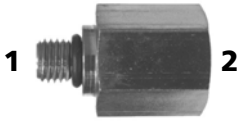
God gave us two ears but only one mouth. Some people say it's because He wanted us to spend twice as much time listening as talking. Others claim it's because He knew that listening was twice as hard.

Send DFBurnham all your high volume quotes!



**Hydraulic
Adapters**

**O-RING PORT
REDUCER/EXPANDER**



Part #	O-Ring Thread 1	O-Ring Thread 2
508-02-04S	5/16-24	7/16-20
508-04-05S	7/16-20	1/2-20
508-04-06S	7/16-20	9/16-18
508-06-04S	9/16-18	7/16-20
508-06-08S	9/16-18	3/4-16
508-08-04S	3/4-16	7/16-20
508-08-06S	3/4-16	9/16-18
508-08-10S	3/4-16	7/8-14
508-08-12S	3/4-16	1-1/16-12
508-10-04S	7/8-14	7/16-20
508-10-06S	7/8-14	9/16-18
508-10-08S	7/8-14	3/4-16
508-10-12S	7/8-14	1-1/16-12
508-12-04S	1-1/16-12	7/16-20
508-12-06S	1-1/16-12	9/16-18
508-12-08S	1-1/16-12	3/4-16
508-12-10S	1-1/16-12	7/8-14
508-12-14S	1-1/16-12	1-3/16-12
508-12-16S	1-1/16-12	1-5/16-12
508-12-20S	1-1/16-12	1-5/8-12
508-14-08S	1-3/16-12	3/4-16
508-14-10S	1-3/16-12	7/8-14
508-14-12S	1-3/16-12	1-1/16-12
508-16-06S	1-5/16-12	9/16-18
508-16-08S	1-5/16-12	3/4-16
508-16-10S	1-5/16-12	7/8-14
508-16-12S	1-5/16-12	1-1/16-12
508-16-14S	1-5/16-12	1-3/16-12
508-16-20S	1-5/16-12	1-5/8-12
508-20-10S	1-5/8-12	7/8-14
508-20-12S	1-5/8-12	1-1/16-12
508-20-16S	1-5/8-12	1-5/16-12
508-20-24S	1-5/8-12	1-7/8-12
508-24-12S	1-7/8-12	1-1/16-12
508-24-16S	1-7/8-12	1-5/16-12
508-32-16S	2-1/2-12	1-5/16-12
508-32-20S	2-1/2-12	1-5/8-12
508-32-24S	2-1/2-12	1-7/8-12

*Some sizes available in Stainless Steel
More sizes available
Available in an extender*

A ship in a safe harbor is safe, but that is not what a ship is built for.

— William Shedd

FEMALE SWIVELS STEEL FLARE

JIC SWIVEL NUT ELBOW

SAE 070221
MS 51531



Part #	JIC Thread Size 1	JIC Thread Size 2
622-04-04S	7/16-20	7/16-20
622-05-05S	1/2-20	1/2-20
622-06-06S	9/16-18	9/16-18
622-08-08S	3/4-16	3/4-16
622-08-06S	3/4-16	9/16-18
622-10-10S	7/8-14	7/8-14
622-10-08S	7/8-14	3/4-16
622-12-12S	1-1/16-12	1-1/16-12
622-12-10S	1-1/16-12	7/8-14
622-14-14S	1-3/16-12	1-3/16-12
622-16-16S	1-5/16-12	1-5/16-12
622-20-20S	1-5/8-12	1-5/8-12
622-24-24S	1-7/8-12	1-7/8-12
622-32-32S	2-1/2-12	2-1/2-12

*Some Sizes available in Stainless Steel
More sizes available*

JIC SWIVEL TO MALE PIPE ELBOW



Part #	JIC Thread Size 1	Male Pipe Thread 2
627-02-04S	7/16-20	1/8
627-04-04S	7/16-20	1/4
627-06-04S	9/16-18	1/4
627-06-06S	9/16-18	3/8
627-08-06S	3/4-16	3/8
627-08-08S	3/4-16	1/2
627-10-08S	7/8-14	1/2
627-12-12S	1-1/16-12	3/4
627-14-12S	1-3/16-12	3/4
627-16-16S	1-5/16-12	1
627-20-20S	1-5/8-12	1-1/4
627-24-24S	1-7/8-12	1-1/2
627-32-32S	2-1/2-12	2

*Also available in Stainless Steel
More sizes available*